

2001 BEHAVIORAL RISK FACTORS OF ARIZONA ADULTS

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EXECUTIVE SUMMARY

This report examines specific behavioral risk factors and chronic diseases in the State of Arizona as of the year 2001. The Annual Survey Results portion of this report contains information on high-risk behaviors and chronic diseases that are surveyed each year. The Module Survey Results portion contains information on high-risk behaviors and chronic diseases that may or may not be surveyed each year. The State-Added Questions Survey Results portion contains information on high-risk behaviors whose addition was suggested by the Arizona Department of Health Services and that may or may not be surveyed each year. The Behavioral Risk Factor Survey (BRFS) program is a rich source of state-level public health data; these data have become integral to health promotion, disease prevention, and intervention planning throughout Arizona.

Highlights of the 2001 Behavioral Risk Factors Survey:

- 16.9% of all respondents reported that they did not have health coverage.
- Almost 40% of Arizonans with less than a high school education reported that they did not have health coverage.
- 6.1% of respondents reported that a doctor told them they had diabetes.
- 21.5% of respondents were current smokers.
- 18.5% of respondents had a body mass index that classified them as obese.
- 57.8% of male respondents 40 years of age or older reported having a PSA blood test.
- 23.7% of respondents reported they were told by a doctor they have arthritis.
- 22.5% of female respondents 40 years of age or older with a household income <\$15,000 have not had a routine mammogram.
- 23.4% of female respondents 18-24 years of age, who were eligible for a pap smear have never had one.
- 59.0% of the adult population in Arizona with less than a high school education reported not having a dental visit in the past year.
- 75.6% of all respondents reported consuming fewer than five servings of fruits and vegetables each day.
- 82.7% of respondents with less than a high school education reported that they did not know that folic acid prevents birth defects.
- Almost 26% of respondents in the 45-54 year age group reported experiencing "a lot" of stress in the past year.

RISK FACTORS/CHRONIC DISEASE TERM USAGE

Arthritis Respondents who reported a doctor told them they had arthritis.

Current Smoking Respondents who reported smoking 100 cigarettes during their lifetime

and who smoke now (regularly or irregularly).

Dental Visit Respondents who reported they had not had a dental visit in the past

year.

Diabetes Respondents who reported a doctor told them they had diabetes.

Five A Day Respondents who reported they had not heard of the program "Five A

Day for Better Health."

Folic Acid Respondents 18-44 years of age who reported a reason other than

preventing birth defects as the reason experts recommend that women

take folic acid.

Fruits/Vegetables Respondents who reported that they consumed fewer than five servings

of fruits and vegetables daily.

Health Care Plan Respondents who reported that they did not have health care coverage.

HIV/AIDS Testing Respondents 18-64 years of age who reported that they have not been

tested for HIV.

Limited Activities Respondents who reported they were limited in any activities due to any

impairment or health problems.

Mammography Female respondents 40 years of age and older who reported that they had

never had a mammogram.

No Leisure-Time Activity Respondents who reported that they did not participate in physical

activity in the past month outside of normal work-related activities.

Overweight The CDC defines overweight as a Body Mass Index (BMI) 25.0 to 29.9,

and obesity as a BMI ≥30.0. BMI is weight in kilograms divided

by height in meters squared (W/H²).

PSA Blood TestMale respondents aged 50 years and older who reported that they

had not had a PSA blood test.

Respondent Arizona residents 18 years of age or older. In some cases various

subset(s) of this group may be used.

INTRODUCTION

In 2001, 40,851 residents of Arizona died. The table below lists the top 10 causes of death of Arizona residents in 2001.

Seven of ten deaths in the U.S. are due to chronic diseases. Preventable risk factors are often the underlying causes of these deaths. A few changeable risk behaviors, alone or in combination, bring excessive suffering and premature death to millions. Three such behaviors—tobacco use, poor nutrition, and lack of physical activity—are major contributors to this country's leading killers, cardiovascular disease and cancer. These behaviors also exacerbate the devastating complications of diabetes and increase the risk for other serious chronic illnesses such as chronic lung disease, arthritis, and osteoporosis.²

Since 1982, through a cooperative agreement with the Centers for Disease Control and Prevention (CDC), the Arizona Department of Health Services (ADHS) has implemented the Behavioral Risk Factor Survey (BRFS) as a method of collecting annual data on health risk behaviors of non-institutionalized residents 18 years of age and older. The purpose of the BRFS is to provide data that can be used to plan, implement, and monitor health promotion and disease prevention efforts in Arizona.

2001 ARIZONA LEADING CAUSES OF DEATH

RANK	CAUSE OF DEATH	NUMBER OF DEATHS	AGE ADJUSTED MORTALITY RATE	PERCENTAGE OF TOTAL DEATHS
1	Heart Disease	10,312	201.7	25.2
2	Malignant Neoplasms - Cancer	8,914	169.2	21.8
3	Chronic Lower Respiratory Disease	2,463	46.9	6.0
4	Unintentional Injury	2,430	46.6	5.9
5	Cerebrovascular Disease	2,416	47.7	5.9
6	Alzheimer's Disease	1,103	22.5	2.7
7	Influenza and Pneumonia	1,100	21.9	2.7
8	Diabetes Mellitus	1,040	19.9	2.5
9	Chronic Liver Disease & Cirrhosis	635	12.3	1.6
10	Nephritis, Nephrotic Syndrome, & Nephrosis	622	12.0	1.5

^{*} All death rates are age-adjusted to the 2000 U.S. population. ** Only available data for the United States.

- 1. Mrela, CK, Arizona health status and vital statistics, 2002. Bureau of Public Health Statistics, Arizona Department of Health Services.
- CDC. Unrealized Prevention Opportunities: Reducing The Health And Economic Burden Of Chronic Disease, November 2000.

METHODOLOGY

A. SAMPLING DESIGN

The Arizona BRFS is a random sample telephone survey. Using disproportionate stratified sampling, random digit dialing, and a Computer Assisted Telephone Interviewing (CATI) system. The survey has the potential to represent 96.3% of all households in Arizona (i.e., those who have telephones according to Arizona Department of Economic Security data for the year 2000, the latest year available). A sample size of 3,200 interviews over a 12-month period was selected to achieve an acceptable 95% confidence interval of $\pm 3\%$ on risk factor prevalence estimates of the adult population. This means that the estimated prevalence of a given risk factor can be reliably projected across the total population of Arizona residents. Prevalence estimates of individual demographic variables, especially those that yield smaller sample sizes, do not achieve the same level of accuracy as the total sample.

A demographic profile of the Arizona population is reported in Appendix I: 2001 Arizona Demographic Profile.

B. QUESTIONNAIRE

The questionnaire, designed through cooperative agreements with the CDC, was divided into four sections. The first section contained questions on health risk behavior; the second section contained demographic information; the third section contained optional modules, and the fourth section contained State-added questions. The optional modules selected for the 2001 Arizona BRFS include sections on diabetes, quality of life and care giving, women's health, oral health, fruits and vegetables, folic acid, tobacco indicators, and other tobacco products. State-added questions included series on influenza, mental health, osteoporosis, antibiotic resistance, and hepatitis C risk.

A list of the survey's core and optional module sections is included in Appendix II: Arizona BRFS Questions Listing.

C. CATI IMPLEMENTATION OF BRFS PROTOCOL

Since August 2000 a private survey research corporation contracted by ADHS contacted residences from 9 a.m.—9 p.m. weekdays, from 11 a.m.—7 p.m. Saturdays, and from 11 a.m.—7 p.m. Sundays. All telephone numbers released in each month's sample received at least 15 attempts over a minimum 14 day period, including at least three attempts during weekends, three attempts during weekday evenings; and three attempts during the daytime weekday. Furthermore, selected respondents who were not able to complete the interview at the time of selection received a minimum of 10 callbacks during the interviewing period.

After a residence had been contacted, one adult (18 years of age or older) was randomly selected from all adults residing in the household to be interviewed.

D. DATA ANALYSIS

The data collected by the ADHS Office of Chronic Disease Epidemiology were compiled and weighted by the CDC. Weighted counts were based on the 2001 Arizona population to accurately reflect the population demographics. The weighting factor considered the number of adults and telephone lines in the household, cluster size, stratum size, and age/race/sex distribution of the general population. The weighting formula is described in Appendix IV: BRFS Weighting Formula.

All analyses presented are based on cell size counts of at least eight cases. The demographic information that was collected and presented in these results includes sex, age, education, household income, race, and ethnicity. Comparisons between responses within demographic categories were analyzed for statistical significance at the alpha =.05 level. Throughout the report, statistical difference is noted when analysis provides 95% confidence that the categories described are different.

Analysis for the table "2001 Behavioral Risk Factor Survey: Risk Factor Prevalence, Percentage Within Demographic Groups" was conducted by the CDC. This table presents the percentage prevalence of high-risk behavior within each demographic group for each of the 15 risk factors and two chronic diseases. The analysis of high-risk groups for the results of each section was conducted by the ADHS Office of Epidemiology and Statistics. These tables present the demographic information for persons reporting a high-risk behavior or chronic disease.

I. SURVEY RESULTS: ANALYSIS OF HIGH-RISK GROUPS

A. HEALTH CARE COVERAGE

In the health care marketplace, consumers have experienced an increase in health care coverage costs. At the same time, many Americans who have coverage do not have a basic understanding concerning the basic elements of health plans. In addition, many consumers are demanding more information about physician's availability in various plans and the covered services.

According to the 2001 Arizona BRFS, 16.9%* of all respondents reported they did not currently have health care coverage (Figure I-A-1). This represents a slight decrease from the percentage of Arizonans reporting lack of health care coverage in 2000. Improving access to health care is an objective of *Healthy People 2010*, an initiative which sets a goal of increasing the proportion of adults with health insurance to 100%.¹

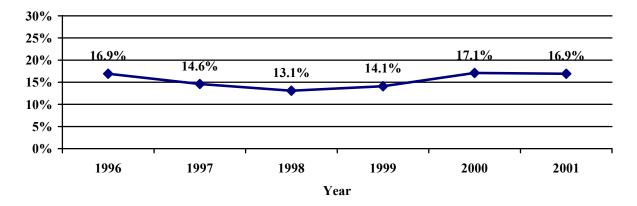


Figure I-A-1. Percentage of BRFS respondents who reported they did not have health coverage in 1996-2001.

While similar percentages of males (17.1%) and females (16.7%) lacked health care coverage, differences in coverage were evident among age, education, income, and race categories (Table I-A-1). Younger respondents, particularly those aged 18-24 (33.4%) and 25-34 (25.8%), were less likely to have coverage than older respondents. As age increased the percentage of respondents without health care coverage decreased.

In addition, Arizonans with less education and lower incomes were more likely to lack health care coverage. Respondents with less than a high school education (39.4%) were significantly less likely to have coverage than those with some college or technical training (14.6%) and college graduates (5.4%). High school graduates (21.4%) were also significantly less likely to have health care coverage than college graduates.

^{* 95%} Confidence Interval: 15.0%-18.9%.

Also, as with age and education, as income increased the percentage of respondents reporting they did not have health care coverage decreased. Respondents earning less than \$15,000 were the least likely to have health care coverage (37.8%) followed by those earning from \$15,000-\$24,999 (35.6%). Significant differences also appeared between race and ethnic groups. While a little less than one-third (31.2%) of Non-Whites lacked health care coverage, only 11.2% of White respondents lacked coverage. Similarly, 36.8% of Hispanics were not covered by health care insurance while only 12.5% of Non-Hispanics lacked coverage.

Reference

 U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

2001 Arizona BRFS Prevalence Of Persons With No Health Care Coverage				
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N		
<u>Sex</u>				
Male	17.1	230		
Female	16.7	335		
<u>Age</u>				
18-24	33.4	99		
25-34	25.8	152		
35-44	19.3	121		
45-54	14.4	93		
55-64	9.3	76		
65+	1.4	15		
Education				
Less than High School	39.4	129		
High School Graduate/GED	21.4	189		
Some College/Tech School	14.6	174		
College Grad	5.4	71		
<u>Income</u>				
<\$15,000	37.8	90		
\$15,000-\$24,999	35.6	208		
\$25,000-\$34,999	20.4	86		
\$35,000-\$49,999	9.8	56		
\$50,000-\$74,999	4.1	24		
≥\$75,000	6.8	23		
Race				
White	11.2	287		
Non-White	31.2	272		
Ethnicity				
Hispanic	36.8	182		
Non-Hispanic	12.5	381		

Table I-A-1. 2001 BRFS results: Prevalence of persons with no health care coverage.

B. LEISURE-TIME ACTIVITY

Physical activity and exercise are critical elements in the promotion of health. Age-appropriate exercise habits reduce the risk of hypertension, diabetes mellitus, colon cancer, osteoporosis, and immune system dysfunction.^{1,2} Regular exercise also can contribute to the functional independence of the elderly and improves the quality of life for people of all ages.³

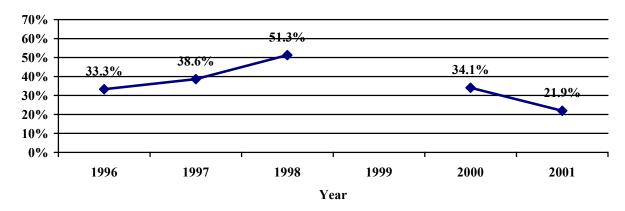


Figure I-B-1. Percentage of BRFS respondents who reported no leisure-time physical activity in 1996-2001. Healthy People 2010 Objective 22.1 is less than 20%.

Analysis of the 2001 Arizona BRFS data indicated that 21.9%* of all respondents reported no leisure-time physical activity within the past 30 days (Figure I-B-1). This percentage is a significant decrease from 34.1% in 2000, however it still fell short of the *Healthy People 2010* Objective of less than 20.0%.⁴

Males were less likely than females to report report no physical activity (17.6% and 26.0% respectively). Arizonans 65+ years were most likely to report no leisure-time activity (27.3%) and the next largest category were respondents 35-44 years (23.0%). The more significant differences between each subset within the various demographic groups occurred in education and income (Table I-B-1). Respondents with less than a high school education were almost four times more likely to report no leisure-time physical activity than college graduates (45.1% vs. 11.1%). High school graduates were more likely to be inactive during leisure time (25.7%) compared to those with some college (19.5%). There was an inverse relationship between income levels and respondents reporting they did not have leisure-time physical activity, i.e., as income increased the percentage of those stating they did not have leisure-time activity decreased. Arizonans with incomes less than \$15,000 were the most likely to report no leisuretime activity (41.1%). The next highest group were those making \$15,000-\$24,999 (31.3%), followed by those making \$25,000-\$34,999 (23.4%). Non-White Arizonans were more likely to be inactive during leisure time (27.7%), compared to White respondents (19.8%). Regarding ethnicity, Hispanics were higher (29.8%) than Non-Hispanics (20.2%).

-

^{* 95%} Confidence Interval: 19.9%-24.1%.

- 1. Siscovick DS, et al., Disease Specific Benefits and Risks of Physical Activities and Exercise. Public Health Reports, 1985; 100(2): 180-188.
- 2. Venjatraman JT, Fernandes G., Exercise, Immunity and Aging. Aging, 1997; 9(1-2): 42-56.
- 3. Katz S, Branch LG, Branson MH, et al., Active Life Expectancy. N Engl J Med, 1983; 309: 1218-1224.
- 4. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health.* 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

2001 Arizona BRFS Prevalence Of Persons With No Leisure-Time Activity			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
<u>Sex</u>			
Male	17.6	236	
Female	26.0	494	
Age			
18-24	16.8	55	
25-34	18.2	102	
35-44	23.0	118	
45-54	22.8	128	
55-64	22.2	124	
65+	27.3	189	
Education			
Less than High School	45.1	169	
High School Graduate/GED	25.7	244	
Some College/Tech School	19.5	212	
College Grad	11.1	104	
Income			
<\$15,000	41.1	109	
\$15,000-\$24,999	31.3	185	
\$25,000-\$34,999	23.4	107	
\$35,000-\$49,999	17.1	85	
\$50,000-\$74,999	13.8	57	
≥\$75,000	11.5	43	
Race			
White	19.8	479	
Non-White	27.7	240	
Ethnicity			
Hispanic	29.8	174	
Non-Hispanic	20.2	548	

Table I-B-1. 2001 BRFS results: Prevalence of persons who reported that they did not participate in physical activity during the past 30 days.

C. DIABETES

"Diabetes is associated with long-term complications that affect almost every major part of the body. The disease often leads to blindness, heart and blood vessel disease, strokes, kidney failure, amputations, and nerve damage. Uncontrolled diabetes can complicate pregnancy, and birth defects are more common in babies born to women with diabetes." ¹

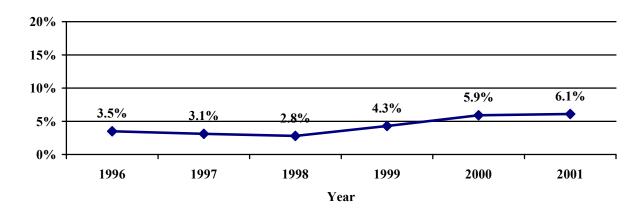


Figure I-C-1. Percentage of BRFS respondents who reported that they were told they had diabetes in 1996-2001. Healthy People 2010 Objective No. 5.3 is 4.0%.

According to the 2001 BRFS, 6.1%* of all respondents reported being told by a doctor they had diabetes. This percentage, shown in Figure I-C-1, represents an increase over 2000, and is more than twice the percentage reporting being told they had diabetes in 1998. The figure exceeds the *Healthy People 2010* objective for diabetes incidence of 4.0%².

Males were almost fifty percent more likely (7.3%) than females (4.9%) to be told they have diabetes. There is a direct relationship between age and the percentage of respondents being told they have diabetes: as age increases so does the percentage of respondents who report being told they have diabetes. The age group 65+ were most likely to be told they have diabetes (13.6%), followed by the 55-64 age group (10.0%). Regarding education, respondents with less than a high school diploma were most likely to be told they have diabetes (10.4%); the next highest group were respondents with some college or technical school (6.3%). Respondents earning less than \$15,000 had the highest percentage saying they were told they have diabetes (10.0%), followed by respondents earning \$15,000-\$24,999 (8.4%). Non-white respondents were more than 60 percent more likely to be told they have diabetes than White respondents (8.3% and 5.1% respectively). Hispanics were almost 40 percent more likely than Non-Hispanic respondents to be told they have diabetes (7.8% and 5.7% respectively).

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^{* 95%} Confidence Interval: 5.1%-7.2%.

As part of an optional module of the 2001 Arizona BRFS, diabetics were asked an additional series of questions pertaining to the control of their condition. Of those responding, 22.7% reported that they take insulin. When asked how often they checked their blood sugar level, 84.9% of the diabetics who took insulin stated "one or more times per day."

Finally, the survey measured use of dilated eye exams among respondents with diabetes. *Healthy People 2010* Objective 5.13 set a goal of increasing to 75% the number of diabetics receiving an annual dilated eye examination². Of the diabetic respondents, 69.5% reported having an dilated eye exam in the past year.

- Diabetes Overview. National Diabetes Information Clearinghouse. Retrieved from World Wide Web July 24, 2001: http://www.nih.gov/health/diabetes/pubs/dmover/d mover.htm.
- 2. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health.* 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

2001 Arizona BRFS Prevalence Of Persons Told They Have Diabetes			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
Sex			
Male	7.3	110	
Female	4.9	128	
Age			
18-24	*	4	
25-34	1.7	13	
35-44	3.3	15	
45-54	7.8	53	
55-64	10.0	56	
65+	13.6	96	
Education			
Less than High School	10.4	55	
High School Graduate/GED	6.0	60	
Some College/Tech School	6.3	79	
College Grad	4.0	43	
<u>Income</u>			
<\$15,000	10.0	43	
\$15,000-\$24,999	8.4	56	
\$25,000-\$34,999	5.1	30	
\$35,000-\$49,999	6.1	33	
\$50,000-\$74,999	5.7	21	
≥\$75,000	4.4	23	
Race			
White	5.1	148	
Non-White	8.3	86	
Ethnicity			
Hispanic	7.7	58	
Non-Hispanic	5.7	179	

Table I-C-1. 2001 BRFS results: Prevalence of persons told they had diabetes. * = Cell size too small.

D. CIGARETTE SMOKING

Tobacco use is responsible for one out of every five deaths in the United States.¹ Cigarette smoking is a major contributor to diseases such as lung cancer, oral cancer, and heart disease. Smoking is also found to be associated with depression, anxiety disorders, colon cancer, and in children of smokers, sudden infant death syndrome (SIDS).²⁻⁴ Clearly, smoking is an important public health issue. *Healthy People 2010* set a target of no more than 12% current smokers 18 years of age or older.⁵ According to the 2001 Arizona BRFS, 21.5%* of respondents identified themselves as current smokers. This percentage ends a general downward trend from a high of 23.7% in 1996 to a low of 18.5 in 2000 (Figure I-D-1). For the coming decade, *Healthy Arizona 2010* has identified tobacco use as one of its 12 focus areas, and has set a target of reducing adult smokers to 14% of the state population. Continued efforts to prevent initial smoking behavior in adolescents, as well as efforts to promote smoking cessation in current smokers using techniques that have documented effectiveness, may decrease the rate of Arizona smokers to meet the *Healthy Arizona 2010* target.

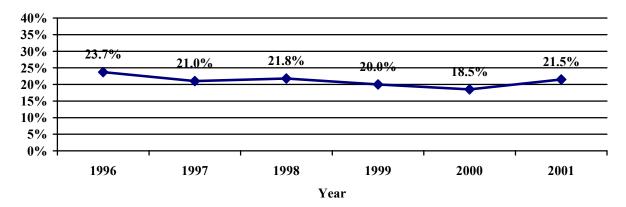


Figure I-D-1. Percentage of BRFS respondents who reported that they were current smokers in 1996-2001. Healthy People 2010 Objective 27.1a is 12.0%.

Percentage of male respondents who were smokers surpassed female respondents reporting they were smokers (23.1% and 20.1%, respectively). Regarding age, the 18-24 year group were more likely to smoke (28.2%) and the next highest group was the 35-44 year group (26.6%). Respondents who were high school graduates were more likely to be current smokers (27.2%) followed by respondents with less than a high school education (24.2%). Over 29% of those with incomes of \$25,000-\$34,999 smoked, and the next highest group had incomes of \$15,000-\$24,999 (28.3%). White Arizonans were about 50 percent more likely to be current smokers (23.9%) than Non-White respondents (15.9%). Regarding ethnicity Non-Hispanic respondents were over 60 percent more likely to be smokers (23.3%) than Hispanic Arizonans (14.5%).

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^{* 95%} Confidence Interval: 19.6%-23.7%.

- Centers for Disease Control and Prevention. Smoking-Attributable Mortality and Years of Potential Life Lost, United States, 1990. MMWR. 1993.
- Slattery ML, Potter JD, Friedman GD, Ma KN, Edward S, Tobacco Use and Colon Cancer. Int J Cancer, 1997; 70 (3): 259 – 264.
- 3. Breslau N. Psychiatric Co-morbidity of Smoking and Nicotine Dependence. Behav. Genet, 1995; 25(2): 95-101.
- Fact Sheet: Sudden Infant Death Syndrome. National Institutes of Child Health and Development. Retrieved from the World Wide Web July 24, 2001: wysiwyg://35/http://nichd.nih.gov/publication s/pubs/sidsfact.htm.
- U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

2001 Arizona BRFS Prevalence Of Current Smokers			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
<u>Sex</u>			
Male	23.1	308	
Female	20.1	399	
Age			
18-24	28.2	103	
25-34	23.4	128	
35-44	26.6	155	
45-54	21.2	132	
55-64	22.6	111	
65+	8.7	67	
Education			
Less than High School	24.2	97	
High School Graduate/GED	27.2	240	
Some College/Tech School	23.8	252	
College Grad	12.5	116	
Income			
<\$15,000	23.3	76	
\$15,000-\$24,999	28.3	171	
\$25,000-\$34,999	29.6	127	
\$35,000-\$49,999	21.6	110	
\$50,000-\$74,999	20.3	75	
≥\$75,000	10.9	51	
Race			
White	23.9	544	
Non-White	15.9	149	
Ethnicity			
Hispanic	14.5	87	
Non-Hispanic	23.3	614	

Table I-D-1. 2001 BRFS results: Prevalence of persons who reported that they are current smokers and have smoked at least 100 cigarettes in their life.

E. OVERWEIGHT (BMI)

During the past ten years, increases in the prevalence of obesity have been documented. In the United States more than one-half of adults are overweight and nearly one-quarter are obese. The body mass index (BMI) is a relationship between weight and height and is used to determine obesity and assess health risk. BMI is calculated using the following formula:

(pounds *
$$0.454$$
) ÷ (inches * 0.0254)² or (Kg/M²).

According to the 2001 Arizona BRFS, 18.5% of respondents exceeded the BMI standard for obesity, defined as a BMI \geq 30.0 (Figure I-E1). However, the 2001 results showed that 56.0% of Arizonans were either overweight or obese (BMI \geq 25). *Healthy People 2010* Objective 19.2 set a goal of reducing obese BMIs to a prevalence of <15% among adults 20 years of age or older (defined as a BMI \geq 30).²

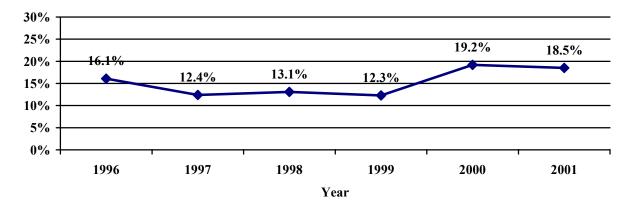


Figure I-E-1. 1996-2001 percent of BRFS respondents who reported weights exceeding BMI limits. Healthy People 2010 Objective 19.2 was 15.0%.

Men were more likely to be obese (19.6%) than women (17.2%) (Table I-E-1). Respondents in the 55-64 age group were the most likely to be obese (27.0%) while the 18-24 age group were significantly less likely to be obese (6.1%). Arizonans with a college education were the least likely to be obese (15.7%) and the highest group were respondents with less than a high school education (22.6%). Regarding income the highest group respondents with incomes greater than \$75,000 were lowest (16.6%) with the highest occurring among Arizonans with incomes less than \$15,000 (30.4%). Non-Whites were more likely to be obese (22.6%) than Whites (17.0%). With respect to ethnicity, Hispanics were more apt to be obese (22.1%) while Non-Hispanics were least likely (17.7%). As with promoting increased number of servings of fruits and vegetables, it will be important to focus efforts to reduce overweight and obesity on all segments of the Arizona population. Such efforts are particularly needed, given that obesity substantially raises the risk of morbidity from hypertension, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems, and endometrial, breast, prostate and colon cancers.³

- Statistics Related to Overweight and Obesity. National Institute of Diabetes and Digestive and Kidney Diseases: Weight Control Information Network. Retrieved from the World Wide Web July 24, 2001. http://www.niddk.nih.gov/health/nutrit/pubs/s tstobes.htm.
- 2. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health.* 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
- 3. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. National Institutes of Health, National Heart, Lung, and Blood Institute. Preprint June 1998.

2001 Arizona BRFS Prevalence Of Overweight Or Obese Persons			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
Sex			
Male	19.6	261	
Female	17.2	319	
Age			
18-24	6.1	24	
25-34	18.6	103	
35-44	19.1	107	
45-54	25.4	123	
55-64	27.0	111	
65+	15.0	106	
Education			
Less than High School	22.6	80	
High School Graduate/GED	18.6	171	
Some College/Tech School	19.5	189	
College Grad	15.7	138	
<u>Income</u>			
<\$15,000	30.4	77	
\$15,000-\$24,999	18.7	121	
\$25,000-\$34,999	17.4	80	
\$35,000-\$49,999	21.7	97	
\$50,000-\$74,999	21.9	75	
≥\$75,000	16.6	68	
Race			
White	17.0	372	
Non-White	22.6	202	
Ethnicity			
Hispanic	22.1	120	
Non-Hispanic	17.7	455	

Table I-E-1. 2001 BRFS results: Prevalence of persons classified as obese, defined as BMI ≥30.0.

F. PROSTATE CANCER SCREENING

Recent studies have demonstrated that the use of a prostate specific antigen (PSA) and transrectal ultrasound (TRUS) along with the digital rectal examination (DRE) may help in the early detection of prostate cancer.

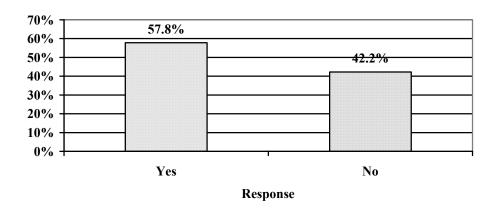


Figure I-F-1. Responses to the 2001 Arizona BRFS question: Have you ever had a PSA blood test?

Male respondents who were at least 40 years of age were surveyed on whether they had a Prostate Specific Antigen (PSA) blood test. Nearly 60 percent* responded that they had a PSA blood test (Figure I-F-1).

Men in the older age groups were more likely to have had the PSA test (46.6% of men 45-54 years, 43.2% of men 55-64 years, and 87.6% of men 65 years or older). Generally, as education levels increased so did the percentage of men getting the PSA test, college graduates were highest (67.2%) followed by those with some college or technical school (61.2%). Mid-level income levels were more likely to have had the test; highest was income levels of \$35,000-\$49,999 (63.8%) and the next highest group reporting incomes of \$25,000-\$34,999 (62.9%). Test taking differed significantly by race White respondents were more than 30 percent more likely to have the test than Non-Whites (61.3% and 46.8% respectively). Non-Hispanics were almost 30 percent more likely to have the test (59.9%) than Hispanics (46.3%).

-

^{* 95%} Confidence Interval: 52.7%-62.8%.

2001 Arizona BRFS Prevalence Of Men Who Have Had A PSA Test			
GROUPS	WEIGHTED PERCENTAGE	UNWEIGHTED N	
<u>Sex</u>			
Male	57.8	479	
Female	N/A	N/A	
Age			
35-44*	20.2	26	
45-54	46.6	99	
55-64	43.2	131	
65+	87.6	223	
Education			
Less than High School	45.9	48	
High School Graduate or GED	44.2	91	
Some College or Tech School	61.2	142	
College Grad	67.2	196	
<u>Income</u>			
<\$15,000	46.8	34	
\$15,000-\$24,999	51.3	69	
\$25,000-\$34,999	62.9	68	
\$35,000-\$49,999	63.8	91	
\$50,000-\$74,999	57.4	67	
≥\$75,000	58.5	94	
Race			
White	61.3	394	
Non-White	46.8	73	
Ethnicity			
Hispanic	46.3	47	
Non-Hispanic	59.9	427	

Table I-F-1. 2001 BRFS survey results: Prevalence of men over age 40* who have had a PSA blood test. N/A=Not applicable.

II. MODULE SURVEY RESULTS: ANALYSIS OF HIGH-RISK GROUPS

A. ARTHRITIS AND QUALITY OF LIFE

The leading causes of disability in this country are arthritis and other rheumatic conditions. In 1992 these maladies affected 42.7 million people and cost \$65 billion. As the Baby Boomer generation ages, these numbers will increase.¹

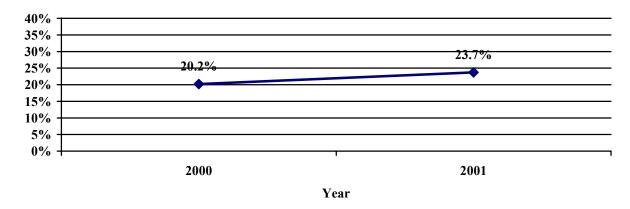


Figure II-A-1: 2000-2001 Percentage of BRFS respondents reported being told by a doctor that they have arthritis.

Approximately 23.7% of Arizonans have been told by a doctor that they have arthritis (Figure II-A-1). More women than men have been told they have arthritis (26.6% vs. 20.6%). As expected, there is a positive relationship with regards to age, as age increases so does the percentage of people being told they have arthritis. Those over age 65 were highest (55.9%) followed by those in the 55-64 age group (37.2%). There also seems to be a positive relationship between lower levels of education and having arthritis. Respondents with less than a high school education are most likely to be told they have arthritis (29.8%); next were those who completed high school requirements (25.1)%. Over 30 percent of persons with incomes less than \$15,000 reported being told they have arthritis, compared to less than 20% in the two highest income categories. However, arthritis affected Non-Whites less than White respondents: 26.6% of White respondents were diagnosed with arthritis compared to 16.0% of Non-Whites, almost twice as many Non-Hispanics as Hispanics had been diagnosed with arthritis (25.9% and 13.2% respectively).

Increasing the length of healthy life for all Americans is one of the objectives contained in the *Healthy People 2010* program. The combination of public health programs, improved social conditions, and private medical care, have contributed to the lengthening of life expectancy from 47 years in 1900 to 75 years in 1989. However, increased life expectancy has included periods of lower health-related quality of life for some people.²

The 2001 Arizona BRFS asked respondents if they are limited in any activities because of physical, mental, or emotional problems. Slightly more than 18% responded that their activities were affected by health problems. Limited activities were more likely to be noted by older respondents, White and Non-Hispanic Arizonans.

- Centers for Disease Control and Prevention. CDC Surveillance Summaries, May 8, 1998 MMWR 1998 47 (No. 17).
- 2. Centers for Disease Control and Prevention. CDC Surveillance Summaries, May 27, 1994 MMWR 1994 43 (No. 20).

2001 Arizona BRFS Prevalence Of Those Reporting Being Told They Have Arthritis			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
<u>Sex</u>			
Male	20.6	288	
Female	26.6	538	
Age			
18-24	4.0	11	
25-34	5.7	33	
35-44	16.0	82	
45-54	24.6	164	
55-64	37.1	175	
65+	55.9	361	
Education			
Less than High School	29.8	119	
High School Graduate/GED	25.1	240	
Some College/Tech School	24.0	273	
College Grad	19.5	191	
<u>Income</u>			
<\$15,000	30.6	87	
\$15,000-\$24,999	27.0	168	
\$25,000-\$34,999	24.2	121	
\$35,000-\$49,999	29.2	138	
\$50,000-\$74,999	17.0	86	
≥\$75,000	14.5	72	
Race			
White	26.6	650	
Non-White	16.0	155	
Ethnicity			
Hispanic	13.2	97	
Non-Hispanic	25.9	715	

Table II-A-1. 2001 BRFS results: Prevalence of persons reporting being told they have arthritis.

B. ROUTINE MAMMOGRAPHY

The key to reduction in breast cancer mortality is dependent upon successful treatments and early detection. Routine mammography is a critical tool for breast cancer detection. Currently, the American Cancer Society recommends mammography for women 40-49 years of age, while the National Cancer Institute recommends that women discuss mammography with their physician. The benefit of obtaining routine mammograms is the ability of this test to detect tumors smaller than would be detectable using a breast self-exam. Small tumors are more likely to be associated with an early stage of breast cancer and therefore respond better to treatment.

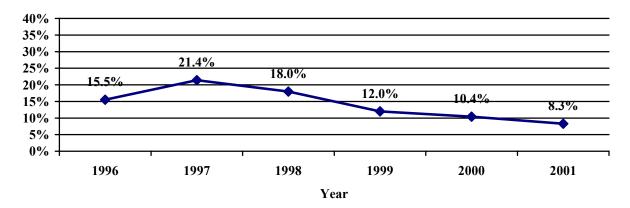


Figure II-B-1. Percentage of BRFS female respondents 40 years of age or older who reported they never had a mammogram in 1996-2001. Healthy People 2010 Objective 3.14 is 70.0% of women \geq 40 years of age.

Analysis of the 2001 Arizona BRFS showed that 8.3% of females 40 years of age or older responded that they had never had a mammogram. This figure represents the fourth year of downward trend from a high of 21.4% in 1997.

Table II-B-1 shows that women in their early 40s were the least likely to have had a mammogram (17.6%). Women in the 55-64 age group were the most likely to have had a mammogram; only 5.2% indicated they had not had one. Women with less than a high school education were less likely to have had the exam (11.9%) and respondents with some college or technical school were most likely to have had one (6.0%). A significant difference was also noted between each end of the income spectrum: Women earning less than \$15,000 were significantly less likely to have had a mammogram compared to those earning \$25,000-\$34,999 (22.5% compared to 5.5%). White women were almost twice as likely to have had a mammogram as Non-Whites (7.1% and 13.0% respectively). Hispanics were about 50 percent less likely (7.8%) than Non-Hispanics (11.8%) to have had mammography.

Most breast cancers are discovered by women through self-exams. Unfortunately, one-third of these women will wait at least three months before seeking treatment. Reasons for delayed

medical care include interpretation of symptoms as non-threatening, and economic limitations to accessing services. Removal of these barriers is essential for successful breast cancer treatment. Like other health behaviors, efforts to increase mammography must be emphasized to all segments of Arizona's female population.

Reference

1. Facione NC, Dodd MJ, Holzemer W, Meleis AI. Helpseeking for Self-Discovered Breast Symptoms. Implications for Early Detection. Cancer Pract., 1997; 5(4): 220-227.

2001 Arizona BRFS Prevalence Of Women Who Have Never Had A Mammogram

	iniogi ani	
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N
Sex		
Male	N/A	N/A
Female	8.3	115
Age		
18-24	N/A	N/A
25-34	N/A	N/A
35-44	17.6	40
45-54	8.1	28
55-64	5.2	15
65+	5.7	32
Education		
Less than High School	11.9	22
High School Graduate/GED	9.5	41
Some College/Tech School	6.0	29
College Grad	8.0	23
<u>Income</u>		
<\$15,000	22.5	21
\$15,000-\$24,999	7.6	26
\$25,000-\$34,999	5.5	9
\$35,000-\$49,999	8.2	18
\$50,000-\$74,999	6.7	10
≥\$75,000	*	*
Race		
White	7.1	82
Non-White	13.0	33
Ethnicity		
Hispanic	11.8	16
Non-Hispanic	7.8	99
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Table II-B-1. 2001 BRFS results: Prevalence of women 40 year of age or older, who reported that they never had a mammogram. N/A=Not applicable. * = Cell size too small.

C. ROUTINE PAP SMEAR

The most effective method of diagnosing pre-cancerous conditions (cervical dysplasia) and localized early stage cervical cancer is effective routine screening of all women using Pap smear testing. Routine screening programs using Pap smear testing can reduce incidence and, thus, mortality, of cervical cancer by 93%.¹

The Human Papilloma Virus (HPV), a sexually transmitted disease associated with cervical cancer, can also be detected with a Pap smear test.² Increased awareness of the importance of receiving annual Pap smear tests is essential for all women, but especially for women who might be at increased risk for HPV.

2001 Arizona BRFS results showed that 5.9% of women have never had a Pap smear test. This percentage continued a decline since a high of 17.1% in 1997 (Figure II-C-1). The 2001 result fell short of the *Healthy People 2010* Objective 3.11a of 3.0%.

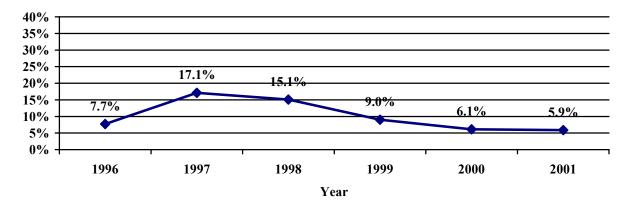


Figure II-C-1: Percentage of women age 18 and older who reported never having a Pap smear test in 1996-2001.

Women in the 18-24 year group were significantly more likely (23.4%) than any other age group to never have had a PAP test. The next highest was the 25-34 age group, notably less at 6.5%. Women with less than a high school education were most likely not to have had a Pap smear test (10.8%), over fifty percent higher than the next highest group; respondents with some college or technical training (7.0%). There appears to be a positive relationship regarding income levels and having a Pap smear test that is women with higher incomes were more likely to have had the test. Women with income under \$15,000 were least likely to have had the test (10.4%) followed by the \$15,000-\$24,999 income group (7.5%).

Non-White women were more than twice as likely not to have had a Pap smear (9.9%) than White respondents (4.3%). Hispanic women were more than twice as likely not to have received the test (10.9%) than Non-Hispanic women (4.7%).

- 1. Eddy DM. Screening for Cervical Cancer. Annals Internal Medicine 1990, vol.113, pgs. 214-226.
- 2. Cervical Cancer Resource Center, American Cancer Society, Atlanta, GA, 2000.

2001 Arizona BRFS Prevalence Of Woman Who Have Never Had A Pap Smear Test.			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
<u>Sex</u>			
Male	N/A	N/A	
Female	5.9	94	
<u>Age</u>			
18-24	23.4	27	
25-34	6.5	14	
35-44	*	*	
45-54	*	*	
55-64	*	*	
65+	5.6	33	
Education			
Less than High School	10.8	25	
High School Graduate/GED	5.3	27	
Some College/Tech School	7.0	28	
College Grad	2.2	13	
<u>Income</u>			
<\$15,000	10.4	14	
\$15,000-\$24,999	7.5	17	
\$25,000-\$34,999	6.5	11	
\$35,000-\$49,999	*	*	
\$50,000-\$74,999	*	*	
≥\$75,000	*	*	
Race			
White	4.3	52	
Non-White	9.9	40	
Ethnicity			
Hispanic	10.9	25	
Non-Hispanic	4.7	68	

Table II-C-1. 2001 BRFS results: Prevalence of women with an intact cervix who reported that they never had a Pap smear. N/A=Not applicable.

^{* =} Cell size too small.

D. ORAL HEALTH

About 30,000 Americans are diagnosed with oral and throat cancers annually. There are also more than 8,000 deaths from both diseases each year. Recently, the importance of oral health was emphasized in the U.S. Surgeon General's Report on Oral Health, released in 2000. Healthy Arizona 2010 includes the objective of increasing the proportion of children and adults who receive dental care each year.

Results from the 2001 BRFS showed that 36.3% of respondents had not had a dental visit within the past year (Figure II-D-1). This percentage is up from 2000 (33.1%), and continues a consistent trend of over a third of the Arizona population not visiting the dentist each year. This percentage exceeds the *Healthy Arizona 2010* goal of 45% of adults not receiving regular dental visits within the past year.²

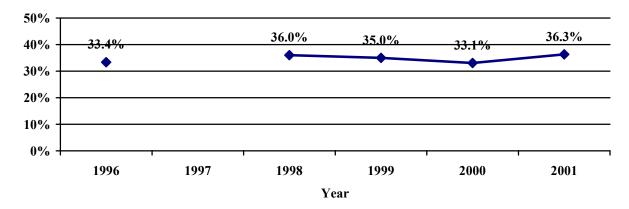


Figure II-D-1. 1996-2001 percentage of BRFS respondents who reported that they have not had a dental visit within the past year.

Table II-D-1 describes respondents who reported they did not have a dental visit in the past year. Men were less likely to have visited a dentist in the past year (39.5%) than women (33.3%). Respondents in the 25-34 year group were the least likely to have a visit within the last 12 months (42.3%) and the next highest was the 18-24 age group (40.8%). Higher education and income levels had a positive relationship with regard to having a dental visit in the past year, i.e., as education and income increased so did the likelihood of having had a dental visit in the past year. Arizonans with less than a high school education and high school graduates were more likely not to have had a visit to the dentist in the past 12 months compared to those with some college or college graduates. Respondents with incomes under \$15,000 or \$15,000-\$24,999 were significantly less likely to have visited a dentist in the past year than any higher income categories. Respondents who did not have a dental visit in the past year are primarily Non-White (46.7%) and Hispanic (46.3%). Respondents who did not have dental insurance were less likely to have visited a dentist in the past year than those with insurance

(45.4% vs. 24.7%). Of those responding to the 2001 BRFS, 57.6% reported that they had insurance covering some or all of their routine dental care.

- 1. Centers for Disease Control and Prevention. Improving Oral Health: Preventing Unnecessary Disease Among All Americans, At-A-Glance, 1999.
- 2. Arizona Department of Health Services. Arizona 2010: Collaborating for a Healthier Future. 2001.

2001 Arizona BRFS			
Prevalence Of Respondents Who Did Not Visit The Dentist Or A Dental Clinic Within Past Year			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
Sex			
Male	39.5	526	
Female	33.3	686	
Age			
18-24	40.8	122	
25-34	42.3	228	
35-44	36.0	219	
45-54	33.8	212	
55-64	32.7	170	
65+	32.4	261	
Education			
Less than High School	59.0	227	
High School Graduate/GED	42.4	394	
Some College/Tech School	34.3	358	
College Grad	22.6	228	
<u>Income</u>			
<\$15,000	52.6	166	
\$15,000-\$24,999	52.1	305	
\$25,000-\$34,999	35.6	177	
\$35,000-\$49,999	31.9	164	
\$50,000-\$74,999	26.7	103	
≥\$75,000	21.8	85	
Race			
White	32.1	806	
Non-White	46.7	385	
Ethnicity			
Hispanic	46.3	245	
Non-Hispanic	34.2	956	

Table II-D-1. 2001 BRFS survey results: Prevalence of respondents who did not visit the dentist or a dental clinic within the past year.

E. FRUIT AND VEGETABLE CONSUMPTION

It has been known for many years that diet plays a large role in the quality of long-term health. Among adults who do not drink excessively or smoke, diet is the most significant controllable risk factor that determines their health status. It is widely accepted that a significant percentage of all cancer deaths can be attributed to poor dietary habits.

One of the most important dietary habits is the consumption of at least five servings of fruits and vegetables per day. Analysis of the 2001 Arizona BRFS showed that 71.3% of respondents reported that they consume less than five servings of fruits and vegetables per day (Figure II-E-1). This falls short of *Healthy Arizona 2010* Objective 2.1, which stresses the importance of vegetable consumption and sets a target of increasing the proportion of Arizonans aged two years and older who consume at least two daily servings of fruit and at least three daily servings of vegetables (with at least one-third being dark green or deep yellow vegetables) to at least 50%¹.

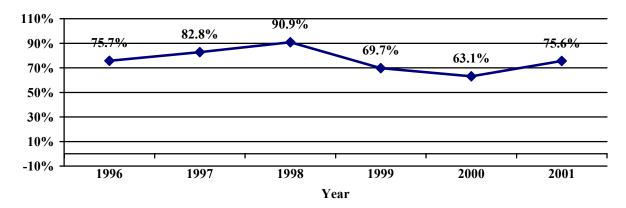


Figure II-E-1. Percentage of BRFS respondents who reported that they consume less than five servings of fruits and vegetables per day in 1996-2001.

Consumption of less than five servings of fruits and vegetables per day is not appreciably related to gender— Arizonans scored equally poorly along this category (Table II-E-1). Respondents in the 35-44 age group were least likely to eat five or more servings of fruits and vegetables (83.6%) followed by persons 25-34 years (76.8%). Generally, as education levels decreased so did the tendency not to eat the recommended number of servings of fruit and vegetables. High school graduates (80.4%) were less likely to eat at least five servings of fruits and vegetables than the other categories. Next were respondents with less than a high school education (78.8%). Arizonans making less than \$15,000 had the highest percentage of people not eating five or more servings of fruits and vegetables (82.4%) followed by the \$35,000-\$49,999 category (76.5%). There was no significant difference regarding race or ethnicity.

These results suggest that efforts at educating Arizonans about the importance of eating five servings of fruits and vegetables each day be targeted throughout the population, regardless of demographic categories.

References

1. Department of Health Services. Arizona 2010: Collaborating for a Healthier Future. 2001.

2001 Arizona BRFS Prevalence Of Persons Not Consuming At Least Five Servings Of Fruits And Vegetables Per Day			
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N	
<u>Sex</u>			
Male	77.1	1,023	
Female	74.1	1,378	
<u>Age</u>]		
18-24	75.5	247	
25-34	76.8	400	
35-44	83.6	486	
45-54	76.2	460	
55-64	73.2	355	
65+	66.0	453	
Education			
Less than High School	78.8	280	
High School Graduate/GED	80.4	718	
Some College/Tech School	75.8	766	
College Grad	69.6	630	
Income			
<\$15,000	82.4	226	
\$15,000-\$24,999	75.0	450	
\$25,000-\$34,999	75.4	357	
\$35,000-\$49,999	76.5	384	
\$50,000-\$74,999	75.9	307	
≥\$75,000	71.9	285	
Race			
White	75.6	1,713	
Non-White	75.5	646	
Ethnicity			
Hispanic	75.4	410	
Non-Hispanic	75.6	1,968	

Table II-E-1. 2001 BRFS survey results: Prevalence of persons who reported that they did not consume at least five servings of fruits and vegetables per day.

F. FOLIC ACID AWARENESS

Each year in the United States, approximately 4000 pregnancies are affected by neural tube defects (NTDs). Studies have shown that up to 50% of neural tube defects (NTDs) such as spina bifida and anencephaly may be preventable through adequate intake of folic acid. Folic acid is a B vitamin that helps form red blood cells and has been found to reduce the risks of certain types of birth defects, cancer, and cardiovascular disease. While folic acid is important for everyone's health, it is especially vital for women of childbearing age. The United States Public Health Service recommends that all women of childbearing age in the United States who are capable of becoming pregnant should consume 400 micrograms (mcg) of folic acid per day for the purpose of reducing their risk of having a pregnancy affected with a neural tube defect.

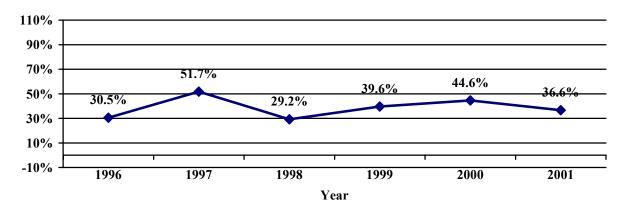


Figure II-F-1. Percentage of BRFS female respondents (18-44 years old) who reported that folic acid prevents birth defects in 1996-2001.

Healthy Arizona 2010 has set an objective of increasing the proportion to 80% of pregnancies begun with an optimum folic acid intake (400 mcg).

Results from the 2001 BRFS showed that 63.4% of women aged 18 - 44 did not know that folic acid might prevent birth defects (Figure II-F-1) while males were significantly less informed (78.4%). Respondents in the 35-44 age group were least likely to know of folic acid's benefits in reducing birth defects (75.9%) followed by the 18-24 age group with 73.0%. Education appears to have a positive relationship with knowledge of folic acid benefits in preventing NTDs; as education decreased so did the percentage of women who knew about folic acid. Respondents with incomes in the \$15,000-\$24,999 range were least likely to know about these benefits (80.3%) followed by Arizonans making less than \$15,000 (76.0%). A closer look at those respondents who reported not knowing that folic acid may prevent birth defects (Table II-F-1) showed that awareness differed significantly among race and ethnic groups. Over 67% of Whites were unaware of this benefit, compared to 77.1% of Non-Whites; 69.8% of Non-Hispanics were

unaware of folic acid's protective effects compared to 75.4% of Hispanics. These results suggest a continued need to educate Arizona residents about folic acid and the role it plays in producing healthy babies.

References

- 1. Centers for Disease Control and Prevention. CDC Surveillance Summaries, August 8, 1997. MMWR 1997; 46 (No. 31).
- 2. Rayburn WF, Stanley JR, Garrett ME. Periconceptional folate intake and neural tube defects. Journal of the American College of Nutrition 15(2): 121-5, 1996.
- 3. Centers for Disease Control and Prevention. CDC Surveillance Summaries, April 30, 1999. MMWR 1999; 48 (No. 16).

2001 Arizona BRFS		
Prevalence Of Respondents (18-44) Who Did Not Know That Folic Acid Prevented Birth Defects		
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N
Sex		
Male	78.4	490
Female	63.4	554
Age		
18-24	73.0	227
25-34	64.7	343
35-44	75.9	440
45-54	N/A	N/A
55-64	N/A	N/A
65+	N/A	N/A
Education		
Less than High School	82.7	144
High School Graduate/GED	80.4	335
Some College/Tech School	67.6	336
College Grad	58.3	223
Income		
<\$15,000	76.0	103
\$15,000-\$24,999	80.3	232
\$25,000-\$34,999	71.6	161
\$35,000-\$49,999	63.6	154
\$50,000-\$74,999	64.4	121
≥\$75,000	61.9	99
Race		
White	67.3	607
Non-White	77.1	419
Ethnicity		
Hispanic	75.4	259
Non-Hispanic	69.8	775

Table II-F-1. 2001 BRFS survey results: Prevalence of respondents (18-44) who did not know that folic acid prevented birth defects. N/A =Not applicable.

III. STATE-ADDED QUESTIONS SURVEY RESULTS: ANALYSIS OF HIGH-RISK GROUPS

A. MENTAL HEALTH

Healthy Arizona 2010 selected mental health (and in particular, depression and related disorders) as one of the twelve areas of focus for the coming decade. Mental illness affects approximately one in five Americans, and costs the U.S. economy over \$43.7 billion in lost work, reduced productivity, and for treatment of the disease. In 1997, Arizona ranked among the top three states for rate of suicide mortality among adolescents aged 15-19. Treatment can help approximately 80% of those suffering from depression, but increased diagnosis of the disease and efforts to reduce the stigma of depression are needed. Healthy Arizona 2010 has set a target of no more than 10 suicides per 100,000.

The 2001 Arizona BRFS also revealed that the state population was fairly evenly divided between those that felt "stressed" and those that did not (Figure III-A-1). Nearly 20% of Arizonans report experiencing "a lot of stress" during the past year, while an additional 31.3% reported a moderate amount of stress. However, 24.4% reported relatively little stress, and almost 19% reported almost no stress.

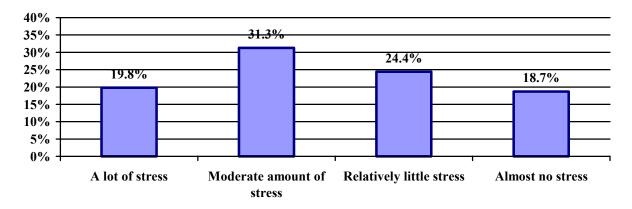


Figure III-A-1. Responses to the 2001 Arizona BRFS question about the amount of stress experienced in the last year.

A closer examination of those reporting a lot of stress in the last year showed that a larger percentage of women reported a lot of stress in their lives compared to men (21.5% vs. 18.0%). Arizonans, aged 45-54, were most likely to feel a lot of stress (25.9%) followed by those 18-24 years (23.3%). College graduates reported a lot of stress most often (22.5%), with no significant difference between second (some college/technical school 19.5%) and third highest (high school graduates 19.3%) groups. Those with incomes less than \$15,000, were more likely to experience a lot of stress (25.3%), next were those with incomes of \$25,000-\$34,999 (24.8%). White respondents (21.3%) were over 30 percent more likely than Non-Whites (16.2%) to report "a lot" of stress. Hispanic Arizonans were less likely than Non-Hispanic to have "a lot" of stress (16.8% and 20.6% respectively).

Depression and related symptoms take a financial and human toll in Arizona. *Healthy Arizona 2010* outlines the following strategies for increasing diagnosis and improving treatment of depression in Arizona:¹

- Address stigma of depression.
- Promote closer integration of behavioral and public health.
- Broaden awareness of depressive illness among primary care providers.

Reference

1. Arizona Department of Health Services. Arizona 2010: Collaborating for a Healthier Future. 2001.

2001 Arizona BRFS Prevalence Of People Who Experienced "A Lot" Of Stress Within The Past Year		
GROUPS	WEIGHTED PERCENT	UNWEIGHTED N
<u>Sex</u>		
Male	18.0	210
Female	21.5	455
<u>Age</u>		
18-24	23.3	86
25-34	19.9	118
35-44	21.0	144
45-54	25.9	152
55-64	17.1	79
65+	11.4	86
Education		
Less than High School	15.8	56
High School Graduate/GED	19.3	181
Some College/Tech School	19.5	232
College Grad	22.5	195
Income		
<\$15,000	25.3	91
\$15,000-\$24,999	19.1	130
\$25,000-\$34,999	24.8	98
\$35,000-\$49,999	17.8	94
\$50,000-\$74,999	17.6	82
≥\$75,000	23.8	80
Race		
White	21.3	502
Non-White	16.2	156
Ethnicity		
Hispanic	16.8	99
Non-Hispanic	20.6	564

Table III-A-1. 2001 BRFS survey results: Prevalence of people who reported experiencing a lot of stress during the last year.

B. OSTEOPOROSIS

The bone disease osteoporosis affects nearly 10 million Americans, and another 18 million are affected by low bone mass. ¹ Calcium plays a critical role in the development and maintenance of bone tissue, and insufficient calcium intake can affect bone health. ¹ Risk factors for osteoporosis include smoking, eating disorders, low body weight, low amount of calcium in the diet, heavy alcohol consumption, and use of certain medications. ¹

The 2001 Arizona BRFS included a series of questions for women about calcium consumption, weight-bearing exercise, and bone-density testing. Over half (51.4%) of Arizonans consume less than two servings of milk or milk products per day, an important source of calcium (Figure III-B-1).

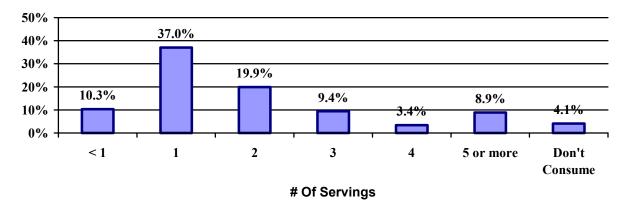


Figure III-B-1. 2001 Arizona BRFS: number of servings of milk or milk products consumed per day.

Table III-B-1 presents the prevalence of women who consumed less than two servings of milk or milk products per day. Women in the 55-64 age group (63.8%) were the most likely to consume less than two servings of milk or milk products, followed by respondents aged 45-54 years (57.2%). There is a generally positive relationship with regard to education and income (i.e., as education and income levels increased so did the likelihood that respondents consumed less than two servings of milk or milk products) per day. Women with some college or technical school (55.4%) were least likely to consume at least two servings, followed by women with a college degree (55.3%). Regarding income, respondents in the greater than \$75,000 income range were most likely not to consume two or more servings (61.7%), followed by women with incomes \$35,000-\$49,999 (55.1%). White women were over 20 percent more likely not to consume two or more servings (53.9%) than Non-Whites (44.2%). Non-Hispanics were significantly more likely to consume less than two servings (50.2%) than Hispanic women (39.8%).

These results suggest that women across the state may be at increased risk for developing osteoporosis due to insufficient calcium consumption. A bone density scan is recommended for all women over 65 and for those younger than 65 with additional risk factors in order to detect the disease. According to the BRFS almost 24% of Arizona women have received this important test.

Reference

1. National Institutes of Health. MEDLINEplus Medical Encyclopedia: Osteoporosis. Retrieved from the World Wide Web July 24, 2001.

 $http://medlineplus.nlm.nih.gov/medlineplus/\\ency/article/000360.htm.$

2001 Aw	anna DDEC	
2001 Arizona BRFS Prevalence Of Women Who Consumed Less Than Two		
Servings Of Milk Or		
GROUPS	WEIGHTED	UNWEIGHTED
	PERCENT	N
<u>Sex</u>		
Male	N/A	N/A
Female	51.4	359
<u>Age</u>		
18-24	44.2	76
25-34	42.0	129
35-44	46.1	180
45-54	57.2	192
55-64	63.8	189
65+	56.5	237
Education		
Less than High School	37.6	108
High School Graduate/GED	50.8	284
Some College/Tech School	55.4	349
College Grad	55.3	260
Income		
<\$15,000	47.4	110
\$15,000-\$24,999	45.6	173
\$25,000-\$34,999	46.6	146
\$35,000-\$49,999	55.1	158
\$50,000-\$74,999	54.5	122
≥\$75,000	61.7	113
Race		
White	53.9	742
Non-White	44.2	247
Ethnicity		
Hispanic	39.8	151
Non-Hispanic	50.2	844

Table III-B-1. 2001 BRFS survey results: Prevalence of women who consumed less than two servings of milk or milk products per day. N/A=Not applicable

C. ANTIBIOTIC RESISTANCE & HEPATITIS C RISK

Included in the 2001 BRFS a set of questions regarding antibiotic resistance. Over half (53.9%) of Arizonans take prescribed antibiotics until it is gone (Figure III-C-1).

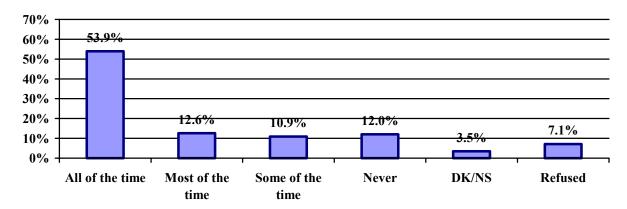


Figure III-C-1. 2001 Arizona BRFS: When prescribed an antibiotic, do you take it until it is gone?

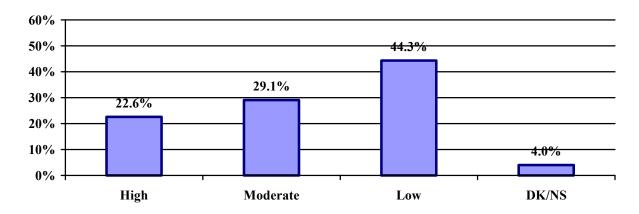


Figure III-C-2. 2001 Arizona BRFS: What level of risk do you feel you are at for Hepatitis C?

When Arizonans were asked if they were at risk for Hepatitis C, 8.7% said yes. Of those, 44.3% reported their risk was low (Figure III-C-2).

APPENDIX I: DEMOGRAPHIC PROFILE

2001 Arizona Demographic Profile		
GROUPS	WEIGHTED PERCENTAGE	UNWEIGHTED N
<u>Sex</u>		
Male	48.8	1087
Female	51.2	1593
Age		
18-24	12.7	257
25-34	19.0	476
35-44	20.6	475
45-54	17.0	477
55-64	11.7	352
65+	18.0	624
Education		
Less than High School	11.4	301
High School Graduate or GED	31.1	795
Some College or Tech School	31.8	888
College Grad	25.5	686
<u>Income</u>		
< \$15,000	7.4	188
\$15,000-\$24,999	19.7	609
\$25,000-\$49,999	31.0	850
\$50,000-\$74,999	14.6	304
□\$75,000	10.2	225
Unknown/Refused	17.2	504
Race		
White	73.9	2094
Non-White	25.0	556
Ethnicity		
Hispanic	21.2	456
Non-Hispanic	77.9	2204

Source: 2001 Arizona BRFS Sample

APPENDIX II: 2001 ARIZONA BRFS QUESTIONS LISTING

CORE SECTIONS

Section 1: Health Status

Section 2: Health Care Access

Section 3: Exercise

Section 4: Hypertension Awareness

Section 5: Cholesterol Awareness

Section 6: Asthma

Section 7: Diabetes

Section 8: Arthritis

Section 9: Immunization

Section 10: Tobacco Use

Section 11: Alcohol Consumption

Section 12: Firearms

Section 13: Demographics

Section 14: Disability

Section 15: Physical Activity

Section 16: Prostate Cancer Screening

Section 17: Colorectal Cancer Screening

Section 18: HIV/AIDS

OPTIONAL MODULES

Module 1: Diabetes

Module 3: Quality of Life and Care Giving

Module 5: Women's Health

Module 6: Oral Health

Module 10: Fruits and Vegetables

Module 12: Folic Acid

Module 13: Tobacco Indicators

Module 14: Other Tobacco Products

STATE ADDED QUESTIONS

Section 1: Influenza

Section 2: Mental Health

Section 3: Osteoporosis

Section 4: Antibiotic Resistance

Section 5: Hepatitis C Risk

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
Section 1: Health Status	2.2. During the past 12 months, was there any time that
1.1. Would you say that in general your health is:	you did not have any health insurance or coverage?
Excellent 1	
Very good 2	Yes 1
Good 3	No 2
Fair 4	Don't know/Not sure 7
Poor 5	Refused 9
Don't know/Not sure 7	
Refused 9	
1.2. Now thinking about your physical health, which	2.3. Do you have one person you think of as your
includes physical illness and injury, for how many days	personal doctor or health care provider?
during the past 30 days was your physical health not	
good?	Yes, only one 1
	More than one 2
Number of days	No 3
None 8 8	Don't know/Not sure 7
Don't know/Not sure 7 7	Refused 9
Refused 9 9	
1.3. Now thinking about your mental health, which	Section 3: Exercise
includes stress, depression, and problems with emotions,	3.1. During the past 30 days, other than your regular
for how many days during the past 30 days was your	job, did you participate in any physical activities or
mental health not good?	exercise such as running, calisthenics, golf, gardening,
	or walking for exercise?
Number of days	
None 8 8	Yes 1
Don't know/Not sure 7 7	No 2
Refused 9 9	Don't know/Not sure 7
	Refused 9
1.4. During the past 30 days, for about how many days	Section 4: Hypertension Awareness
did poor physical or mental health keep you from doing	4.1. Have you ever been told by a doctor, nurse, or other
your usual activities, such as self-care, work, or	health professional that you have high blood pressure?
recreation?	V 1
Number of days	Yes 1
None 8 8	No 2
Don't know/Not sure 7 7 Refused 9 9	Don't know/Not sure 7
Refused 9 9 Section 2: Health Care Access	Refused 9
	4.2. Are you currently taking medicine for your high
2.1. Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs,	blood pressure? Yes 1
or government plans such as Medicare?	No 2
Yes 1	Don't know/Not sure 7
No 2	Refused 9
Don't know/Not sure 7	Actused 7
Refused 9	
Refused 7	

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
Section 5: Cholesterol Awareness 5.1. Blood cholesterol is a fatty substance found in the blood. Have you ever had your blood cholesterol checked? Yes 1 No 2 Don't know/Not sure 7 Refused 9	Module 1: Diabetes MOD1_1. How old were you when you were told you have diabetes? Code age in years Don't know/Not sure 9 8 Refused 9 9
5.2. About how long has it been since you last had your blood cholesterol checked? Within the past month 1 Within the past year 2 Within the past 2 years 3 2 or more years ago 4 Don't know/Not sure 7 Refused 9	MOD1_2. Are you now taking insulin? Yes 1 No 2 Don't know/Not sure 7 Refused 9
5.3. Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high? Yes 1 No 2 Don't know/Not sure 7 Refused 9	MOD1_3. Are you now taking diabetes pills? Yes 1 No 2 Don't know/Not sure 7 Refused 9
Section 6: Asthma 6.1. Have you ever been told by a doctor, nurse, or other health professional that you had asthma? Yes I No 2 Don't know/Not sure 7 Refused 9	MOD1_4. About how often do you check your blood for glucose or sugar? Include times when checked by a family member or friend, but do not include times when checked by a health professional. Times per day Times per week Times per month Times per year Never Never Refused 1 1 1 7 7 7 Refused
6.2. Do you still have asthma? Yes No Don't know/Not sure Refused 9	
Section 7: Diabetes 7.1. Have you ever been told by a doctor that you have diabetes? Yes 1 Yes, only during pregnancy 2 No 3 Don't know/Not sure 7 Refused 9	

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
MOD1_5. About how often do you check your feet for any sores or irritations? Include times when checked by a family member or friend, but do not include times when checked by a health professional. Times per day Times per week Z Times per month 3 Times per year Never 8 8 8 No feet 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9	MOD1_11. Has a doctor ever told you that diabetes has affected your eyes or that you had retinopathy? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD1_6. Have you ever had any sores or irritations on your feet that took more than four weeks to heal?	MOD1_12. Have you ever taken a course or class in how to manage your diabetes yourself?
Yes 1 No 2 Don't know/Not sure 7	Yes 1 No 2 Don't know/Not sure 7
Refused 9	Refused 9
MOD1_7. About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes? Number of times None 8 8 Don't know/Not sure 7 7	Section 8: Arthritis 8.1. During the past 12 months, have you had pain, aching, stiffness or swelling in or around a joint? Yes No 2 Don't know/Not sure 7
Refused 9 9 MOD1_8. A test for hemoglobin "A one C" measures	Refused 9 8.2. Were these symptoms present on most days for at
the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse, or other health professional checked you for hemoglobin "A one C"? Number of times None Never heard of hemoglobin "A one C" test 9 8 Don't know/Not sure 7 7 Refused 9 9	least one month? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD1_9. About how many times in the past 12 months	8.3. Are you now limited in any way in any activities
has a health professional checked your feet for any sores or irritations? Number of times None 8 8 Don't know/Not sure Refused 9 9	because of joint symptoms? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD1_10. When was the last time you had an eye	8.4. Have you ever seen a doctor, nurse, or other health
exam in which the pupils were dilated? This would have made you temporarily sensitive to bright light. Within past year 1 Within past 2 years 2 Within past 5 years 3 5 or more years ago 4 Never 8 Don't know/Not sure 7 Refused 9	professional for these joint symptoms? Yes No 2 Don't know/Not sure 7 Refused 9

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
8.5. Have you ever been told by a doctor that you have	
arthritis? Yes 1	
No 2	
Don't know/Not sure 7	
Refused 9	
8.6. Are you currently being treated by a doctor for arthritis? Yes 1	Section 11: Alcohol Consumption 11.1. A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail,
No 2	or 1 shot of liquor. During the past 30 days, how often
Don't know/Not sure 7	have you had at least one drink of any alcoholic
Refused 9	beverage?
	Days per week 1
	Days per month No drinks in past 30 days $ \begin{array}{ccc} 2 & & \\ 8 & 8 & 8 \end{array} $
	Don't know/Not sure 7 7 7
	Refused 9 9 9
Section 9: Immunization	11.2. On the days when you drank, about how many
9.1. During the past 12 months, have you had a flu shot?	drinks did you drink on the average?
Yes 1	Number of drinks
No 2	Don't know/Not sure 7 7
Don't know/Not sure 7 Refused 9	Refused 9 9
Refused 9 9.2. Have you ever had a pneumonia shot? This shot is	11.3. Considering all types of alcoholic beverages, how
usually given only once or twice in a person's lifetime	many times during the past 30 days did you have 5 or
and is different from the flu shot. It is also called the	more drinks on an occasion?
pneumococcal vaccine.	Number of times
Yes 1	None 8 8
No 2	Don't know/Not sure 7 7
Don't know/Not sure 7 Refused 9	Refused 9 9
Section 10: Tobacco Use	Section 12: Firearms
10.1. Have you smoked at least 100 cigarettes in your	12.1. Are any firearms now kept in or around your
entire life?	home? Include those kept in a garage, outdoor storage
Yes 1	area, car, truck, or other motor vehicle.
No 2	Yes 1
Don't know/Not sure 7	No 2
Refused 9	Don't know/Not sure 7 Refused 9
10.2. Do you now smoke cigarettes every day, some	Section 13: Demographics
days, or not at all?	13.1. What is your age
Every day 1	Code age in years
Some days 2	Don't know/Not sure 0 7
Not at all 3	Refused 0 9
Refused 9	
10.3. During the past 12 months, have you stopped	13.2. Are you Hispanic or Latino?
smoking for one day or longer because you were trying	Yes 1
to quit smoking? Yes 1	No 2 Don't know/Not sure 7
No 2	Refused 9
Don't know/Not sure 7	,
Refused 9	

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
13.3. Which one or more of the following would you say is your race? White 1 Black/African American Asian Native Hawaiian/Other Pacific Islander American Indian, Alaska Native Other [specify]6 Don't know/Not sure Refused 9	13.9. Is your annual household income from all sources: < \$10,000
13.4. Which one of these groups would you say best represents your race? White 1 Black/African American 2 Asian 3 Native Hawaiian/Other Pacific Islander 4 American Indian, Alaska Native 5 Other [specify] (Recall other specify) 6 Don't know/Not sure 7 13.5. Are you: Married 1 Divorced 2 Widoward 2	Refused 99 13.10. About how much do you weigh without shoes? Weight
Widowed 3 Separated 4 Never been married 5 Member of an unmarried couple 6 Refused 9 13.6. How many children less than 18 years of age live in your household? Number of children None 8 8 Refused 9 9	Don't know/Not sure 7 7 7 Refused 9 9 9 13.12. What county do you live in? FIPS county code Don't know/Not sure 7 7 7 7 Refused 9 9 9
13.7. What is the highest grade or year of school you completed? ≤ Kindergarten 1 Elementary 2 Some high school 3 High school graduate 4 Some college/tech school 5 College graduate 6 Refused 9	13.13. Do you have more than one telephone number in your household? Do not include cell phones or numbers that are only used by a computer or fax machine. Yes I No 2 Don't know/Not sure 7 Refused 9
13.8. Are you currently: Employed for wages 1 Self-employed 2 Out of work for more than 1 year 3 Out of work for less than 1 year 4 Homemaker 5 Student 6 Retired 7 Unable to work 8 Refused 9	13.14. How many of these are residential numbers? Residential phone numbers Don't know/Not sure Refused 9

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
13.15. How many adult members of your household currently use a cell phone for any purpose? Number of adults None Don't know/Not sure 7	15.3. How many days per week do you do these moderate activities for at least 10 minutes at a time? Days per week Doesn't Exercise 10 mins wkly 8 8 Don't know/Not sure 7 7
Refused 9	Refused 9 9
13.16. Indicate sex of respondent Male 1 Female 2	
13.17. To your knowledge, are you now pregnant? Yes No 2 Don't know/Not sure 7 Refused 9	15.4. On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities? Hours and minutes per day Don't know/Not sure Refused 7 7 7 Refused 9 9 9
Section 14: Disability 14.1. Are you limited in any way in any activities because of physical, mental, or emotional problems Yes 1 No 2 Don't know/Not sure 7 Refused 9	15.5. Now thinking about the vigorous physical activities you do in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate? Yes 1 No 2 Don't know/Not sure 7
14.2. Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? Yes No 2 Don't know/Not sure 7 Refused 9	Refused 9 15.6. How many days per week do you do these vigorous activities for at least 10 minutes at a time? Days per week Doesn't Exercise 10 mins wkly 8 8 Don't know/Not sure 7 7 Refused 9 9
Section 15: Physical Activity 15.1. When you are at work, which of the following best describes what you do? Would you say: Mostly sitting/standing 1 Mostly walking 2 Mostly heavy labor/physically demanding work 3 Don't know/Not sure 7 Refused 9	15.7. On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities? Hours and minutes per day Don't know/Not sure 7 7 7 Refused 9 9 9
15.2. Now, thinking about the moderate physical activities you do in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate? Yes Yes 1 No 2 Don't know/Not sure 7 Refused 9	Section 16: Prostate Cancer Screening 16.1. A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Have you ever had a PSA test? Yes I No 2 Don't know/Not sure 7 Refused 9

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
16.2. How long has it been since you had your last PSA	17.2. How long has it been since you had your last
test?	blood stool test using a home kit?
Within past year 1	Within past year 1
Within past 2 years 2	Within past years 2
Within past 2 years 2 Within past 3 years 3	Within past 2 years 2 Within past 3 years 3
Within past 5 years 4	Within past 5 years 4
≥5 years ago 5	≥5 years ago 5
Don't know 7	Don't know 7
Refused 9	Refused 9
16.3. A digital rectal exam is an exam in which a	17.3. Sigmoidoscopy and colonoscopy are exams in
doctor, nurse, or other health professional places a	which a tube is inserted in the rectum to view the bowel
gloved finger into the rectum to feel the size, shape, and	for signs of cancer or other health problems. Have you
hardness of the prostate gland. Have you ever had a	ever had either of these exams?
digital rectal exam?	Yes 1
Yes 1	No 2
No 2	Don't know/Not sure 7
Don't know/Not sure 7	Refused 9
Refused 9	
16.4. How long has it been since your last digital rectal	17.4. How long has it been since you had your last
exam?	sigmoidoscopy or colonoscopy?
Within past year 1	Within past year 1
Within past 2 years 2	Within past 2 years 2
Within past 3 years 3	Within past 3 years 3
Within past 5 years 4	Within past 5 years 4
≥5 years ago 5	≥5 years ago 5
Don't know 7	Don't know 7
Refused 9	Refused 9
16.5. Have you ever been told by a doctor, nurse, or	Section 18: HIV/AIDS
other health professional that you had prostate cancer?	18.1. A pregnant woman with HIV can get treatment to
Yes 1	help reduce the chances that she will pass the virus on to
No 2	her baby
Don't know/Not sure 7	True 1
Refused 9	False 2
	Don't know/Not Sure 7
166 17 0 1 1 1 10 1	Refused 9
16.6. Has your father, brother, son, or grandfather ever	18.2. There are medical treatments available that are
been told by a doctor, nurse, or health professional that	intended to help a person who is infected with HIV to
he had prostate cancer?	live longer.
Yes 1	True 1
No 2	False 2
Don't know/Not sure 7 Refused 9	Don't know/Not Sure 7 Refused 9
Ttorasea	18.3. How effective do you think these treatments are
Section 17: Colorectal Cancer Screening 17.1. A blood stool test is a test that may use a special	helping persons with HIV to live longer? Would you
kit at home to determine whether the stool contains	say:
blood. Have you ever had this test using a home kit?	Very effective 1
Yes 1	Somewhat effective 2
No 2	Not at all effective 3
Don't know/Not sure 7	Don't know/Not sure 7
Refused 9	Refused 9
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APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE	
18.4. How important do you think it is for people to know their HIV status by getting tested?	18.7. What was the main reason you had your test HIV in?	for
Would you say:	For hospitalization/surgical procedure 01	
Very important 1	To apply for health insurance 02	
Somewhat important 2	To apply for life insurance 02 To apply for life insurance 03	
Not at all important 3	For employment 04	
Don't know/Not sure 7	To apply for a marriage license 05	
Refused 9	For military induction/military service 06	
	For immigration 07	
	Just to find out if you were infected 08	
	Because of referral by a doctor 09	
	Because of pregnancy 10	
	Referred by your sex partner 11	
	For routine check-up 13	
	Because of occupational exposure 14	
	Because of illness 15	
	Because I am at risk for HIV 16	
	Other 87	
	Don't know/Not sure 77	
	Refused 99	
18.5. As far as you know, have you ever been tested for	18.8. Where did you have the HIV test in?	
HIV? Do not count tests you may have had as part of a	Private doctor, HMO	01
blood donation.	Blood bank, plasma center, Red Cross	02
Yes 1	Health department	03
No 2	AIDS clinic, counseling, testing site	04
Don't know/Not sure 7	Hospital, emergency room, outpatient clinic	05
Refused 9	Family planning clinic	06
	Prenatal clinic, obstetrician's office	07
	Tuberculosis clinic	08
	STD clinic	09
	Community health clinic	10
	Clinic run by employer	11
	Insurance company clinic	12
	Other public clinic	13
	Drug treatment facility	14
	Military induction/military service site	15
	Immigration site	16
	At home, home visit by nurse/health worker	17
	At home using self-sampling kit	18
	In jail/prison	19
	Other	87
	Don't know/Not sure	77
	Refused	99
18.6. Not including blood donations, in what month and	18.9. In the past 12 months has a doctor, nurse, or	
	health professional talked to you about preventing	ouici
year was your last HIV test? Code month and year /	sexually transmitted diseases through condom use?	,
Code month and year/ Don't know/Not sure 7 7 7 7	,	
	Yes 1	
Refused 6 6 6 6	No 2	
	Don't know/Not sure 7	
	Refused 9	

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE				
Module 3: Quality of Life and Care GivingMOD3_1. What is your major impairment or healthproblem?	MOD3_5. During the past 30 days, for about how many days did pain make it hard for you to do your usual activities, such as self-care, work, or recreation? Number of days None 8 8 Don't know/Not sure 7 7 Refused 9 9			
MOD3_2. For how long have your activities been limited because of your major impairment or health problem? Days Weeks 2 Months Years Jon't know/Not Sure Refused 9 9 9	MOD3_6. During the past 30 days, for about how many days have you felt sad, blue, or depressed? Number of days None 8 8 Don't know/Not sure 7 7 Refused 9 9			
MOD3_3. Because of any impairment or health problem, do you need the help of other persons with your PERSONAL CARE needs, such as eating, bathing, dressing, or getting around the house? Yes No 2 Don't know/Not sure 7 Refused 9	MOD3_7. During the past 30 days, for about how many days have you felt worried, tense, or anxious? Number of days None 8 8 Don't know/Not sure 7 7 Refused 9 9			
MOD3_4. Because of any impairment or health problem, do you need the help of other persons in handling your ROUTINE needs, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes? Yes No Don't know/Not sure Refused 9	MOD3_8. During the past 30 days, for about how many days have you felt you did not get enough rest or sleep? Number of days None 8 8 Don't know/Not sure 7 7 Refused 9 9			
ACCAUGOU	MOD3_9. During the past 30 days, for about how many days have you felt very healthy and full of energy? Number of days None 8 8 Don't know/Not sure 7 7 Refused 9 9			

APPENDIX III: 2001 AR	IZONA QUESTIONNAIRE
MOD3_10. Earlier you reported that due to your impairment you need some assistance from another person with your PERSONAL CARE needs. Who	Module 5: Women's Health MOD5_1. A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a
usually helps you with your personal care needs, such as eating, bathing, dressing, or getting around the house?	Yes 1
Reason code	No 2
Husband/wife/partner 0 1	Don't know/Not sure 7
Parent/son/son-in-law/daughter/daughter-in-law 0 2	Refused 9
Other relative 0 3 Unpaid volunteer 0 4	
1	
Paid employee or home health service 0 5 Friend or neighbor 0 6	
Comb of family and/or friends and/or paid help 0 7 Other 0 8	
No one helps me 0 9	
Don't Know/Not Sure 7 7	
Refused 9 9	
MOD3_11. Is the assistance you receive to meet your	MOD5 2. How long has it been since you had your last
personal care needs from all sources:	mammogram?
Usually adequate 1	Within the past year 1
Sometimes adequate 2	Within the past 2 years 2
Rarely adequate 3	Within the past 3 years 3
Don't know/Not sure 7	Within the past 5 years 4
Refused 9	5 or more years ago 5
	Don't know/Not sure 7
	Refused 9
MOD3_12. Earlier you reported that due to your impairment you need some assistance from another	MOD5_3. Was your last mammogram done as part of a routine checkup, because of a breast problem other than
person with your ROUTINE needs. Who usually helps	cancer, or because you've already had breast cancer?
you with handling your routine needs, such as everyday	Routine checkup 1
household chores, shopping, or getting around for other	Breast problem other than cancer 2
purposes?	Had breast cancer 3
Reason code	Don't know/Not sure 7
Husband/wife/partner $\overline{0}$ $\overline{1}$	Refused 9
Parent/son/son-in-law/daughter/daughter-in-law 0 2	
Other relative 0 3	
Unpaid volunteer 0 4	
Paid employee or home health service 0 5	
Friend or neighbor 0 6	
Comb of family and/or friends and/or paid help 0 7	
Other 0 8	
No one helps me 0 9	
Don't Know/Not Sure 7 7	
Refused 9 9	
MOD3_13. Is the assistance you receive to meet your	MOD5_4. A clinical breast exam is when a doctor,
routine needs from all sources:	nurse, or other health professional feels the breast for
Usually adequate 1	lumps. Have you ever had a clinical breast exam?
Sometimes adequate 2	Yes 1
Rarely adequate 3	No 2
Don't know/Not sure 7	Don't know/Not sure 7
Refused 9	Refused 9

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE				
MOD5_5. How long has it been since your last breast exam?	MOD5_10. Have you had a hysterectomy? Yes 1			
Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9	No 2 Don't know/Not sure 7 Refused 9			
MOD5_6. Was your last breast exam done as part of a routine checkup, because of a breast problem other than cancer, or because you've already had breast cancer? Routine checkup 1 Breast problem other than cancer 2 Had breast cancer 3 Don't know/Not sure 7 Refused 9	Module 6: Oral Health MOD6_1. How long has it been since you last visited a dentist or a dental clinic for any reason? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9			
MOD5_7. A Pap smear is a test for cancer of the cervix. Have you ever had a Pap smear? Yes 1 No 2 Don't know/Not sure 7 Refused 9	MOD6_2. How many of your permanent teeth have been removed because of tooth decay or gum disease? Do not include teeth lost for other reasons, such as injury or orthodontics. 1 to 5 6 or more but not all 2 All 3 None 7 Don't know/Not sure 8 Refused 9			
MOD5_8. How long has it been since you had your last Pap smear? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9 MOD5 9. Was your last Pap smear done as part of a	MOD6_3. How long has it been since you had your teeth cleaned by a dentist or dental hygienist? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9 MOD6_4. What is the main reason you have not visited			
routine exam, or to check a current or previous problem? Routine exam 1 Check current/previous problem 2 Other 3 Don't know/Not sure 7 Refused 9	the dentist in the past year? Fear, apprehension, nervous, pain, dislike going 01 Cost 02 Do not have/know a dentist 03 Can't get to office/clinic (too far away, no transportation & no appt avail) 04 No reason to go (no problems, no teeth) 05 Other priorities 06 Have not thought of it 07 Other 08 Don't know/Not sure 77 Refused 99			

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE				
MOD6_5. Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid?	MOD10_5. How often do you eat carrots? Per day 1 Per week 2 Per month 3			
Yes 1 No 2 Don't know/Not sure 7 Refused 9	Per year 4 Never 5 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9			
Module 10: Fruits and Vegetables MOD10_1. How often do you drink fruit juices such as orange, grapefruit, or tomato? Per day Per week Per month Per year Never Don't know/Not sure 1 2 2 2 3 5 5 5 5 5 5 5 7 7 5 7 7 7 5 7 7 7 7 7	MOD10_6. Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat? Per day Per week Per month Per year Never Don't know/Not sure Refused 1 Per day 1 2 1 7 7 Refused Per day 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 4 2 3 3 3 3 4 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5			
Refused 9 9 9 MOD10_2. Not counting juice, how often do you eat fruit? Per day Per week 2 Per month 3 Per year 4 Never 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9	Module 12: Folic Acid MOD12_1. Do you currently take any vitamin pills or supplements? Yes 1 No 2 Don't know/Not sure 7 Refused 9			
MOD10_3. How often do you eat green salad? Per day Per week Per month Per year Never Don't know/Not sure Refused Per day 1 2 2 2 2 3 4 5 5 5 5 9 9 9 9	MOD12_2. Are any of these a multivitamin? Yes 1 No 2 Don't know/Not sure 7 Refused 9			
MOD10_4. How often do you eat potatoes not including french fries, fried potatoes, or potato chips? Per day 1 Per week 2 Per month 3 Per year 4 Never 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9	MOD12_3. Do any of the vitamin pills or supplements you take contain folic acid? Yes 1 No 2 Don't know/Not sure 7 Refused 9			

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE					
ATTENDIA III. 2001 ARIZONA QUESTIONNAIRE					
MOD12_4. How often do you take this vitamin pill or	MOD13_5. In the past 12 months, has a doctor, nurse,				
supplement?	or other health professional advised you to quit				
Times per day 1	smoking?				
Times per week 2	Yes 1				
Times per month Don't know/Not sure 3 7 7 7	No 2				
	Don't know/Not sure 7				
Refused 9 9 9	Refused 9				
MOD12_5. Some health experts recommend that women take 400 micrograms of the B vitamin folic acid,	MOD13_6. Which statement best describes the rules about smoking inside your home?				
for which one of the following reasons	Not allowed 1				
To make strong bones 1	Allowed some places/some times 2				
To prevent birth defects 2	Allowed anywhere 3				
To prevent high blood pressure 3	No rules about 4				
Some other reason 4	Don't know/Not sure 7				
Don't know/Not sure 7	Refused 9				
Refused 9					
Module 13: Tobacco Indicators	MOD13_7. While working at your job, are you indoors				
MOD13_1. How old were you the first time you	most of the time?				
smoked a cigarette, even one or two puffs?	Yes 1				
Code age in years Don't know/Not sure 7 7	No 2 Don't know/Not sure 7				
Refused 9 9	Refused 9				
MOD13_2. How old were you when you first started	MOD13_8. Which of the following best describes your				
smoking cigarettes regularly?	place of work's official smoking policy for indoor public				
Code age in years	or common areas, such as lobbies, rest rooms, and lunch				
Never smoked regularly $\frac{8}{8}$	rooms?				
Don't know/Not sure 7 7	Not allowed 1				
Refused 9 9	Allowed in some areas 2				
	Allowed in all areas 3				
	No official policy 4				
	Don't know/Not sure 7 Refused 9				
MOD13_3. About how long has it been since you last	Refused 9 MOD13_9. Which of the following best describes your				
smoked cigarettes regularly?	place of work's official smoking policy for work areas?				
Within the past month 01	Not allowed 1				
Within the past 3 months 02	Allowed in some areas 2				
Within the past 6 months 03	Allowed in all areas 3				
Within the past year 04	No official policy 4				
Within the past 5 years 05	Don't know/Not sure 7				
Within the past 10 years 06	Refused 9				
10 or more years ago 07					
Don't know/Not sure 77					
Refused 99	Module 14: Other Tobacco Products				
MOD13_4. In the past 12 months, have you seen a doctor, nurse, or other health professional to get any	MOD14 1. Have you ever used or tried any smokeless				
kind of care for yourself?	tobacco products such as chewing tobacco or snuff?				
Yes 1	Yes 1				
No 2	No 2				
Don't know/Not sure 7	Don't know/Not sure 7				
Refused 9	Refused 9				

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE				
MOD14 2. Do you currently use chewing tobacco or	MOD14 7. A bidi is a flavored cigarette from India			
snuff every day, some days, or not at all?	Have you ever smoked a bidi, even one or two puffs?			
Every day 1	Yes 1			
Some days 2	No 2			
Not at all 3	Don't know/Not sure 7			
Don't know/Not sure 7	Refused 9			
Refused 9				
MOD14 3. Have you ever smoked a cigar, even one or	State Added: Influenza			
two puffs?	AZ1 1. During the past 12 months, have you had a flu			
Yes 1	shot?			
No 2	Yes 1			
Don't know/Not sure 7	No 2			
Refused 9	Don't know/Not sure 7			
	Refused 9			
MOD14_4. Do you now smoke cigars every day, some	MOD14_8. Do you now smoke bidis every day, some			
days, or not at all?	days, or not at all?			
Every day 1	Every day 1			
Some days 2	Some days 2			
Not at all 3	Not at all 3			
Don't know/Not sure 7	Don't know/Not sure 7			
Refused 9	Refused 9			
MOD14_5. Have you ever smoked tobacco in a pipe,	AZ1_2. Did you get the shot before the end of 2000 or			
even one or two puffs?	after the beginning of 2001?			
Yes 1	2000 1			
No 2	2001 2			
Don't know/Not sure 7	Don't know/Not Sure 7			
Refused 9	Refused 9			
MOD14_6. Do you now smoke a pipe every day, some days, or not at all?	AZ1_3. At what kind of place did you get your last flu shot?			
Every day 1	Dr's office/HMO 01			
Some days 2	Health Dept 02			
Not at all 3	Another type clinic/ health center 03			
Don't know/Not sure 7	Senior Center 04			
Refused 9	Store 05			
	Hospital/ER 06			
	Workplace 07			
	Other 08			
Don't know/Not Sure 77				
	Refused 99			

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE				
APPENDIA III: 2001 AKI	ZONA QUESTIONNAIRE			
AZ1_4. What is the main reason you didn't get a flu	AZ2_5. During the past 12 months, did your worksite			
shot {during the past 12 months}?	offer any information or activities concerning stress			
Didn't know I needed it 01	management?			
Dr didn't recommend it 02	Yes 1			
Didn't think of it/forgot/missed it 03	No 2			
No flu shots avail 04	Don't know/Not sure 7			
Dr said didn't need it 05	Refused 9			
Didn't think it would work 06				
Don't need a flu shot 07				
Shot could give health problem 08				
Dr recommended against 09				
Don't like shots/needles/don't want it 10				
Other 11				
Don't know/Not Sure 77				
Refused 99				
State Added: Mental Health	AZ2_5a. Which of the following were offered relating			
AZ2_1. During the past year, would you say that you	to stress management?:			
experienced:	Individual classes 1			
A lot of stress	Group classes 2			
A moderate amount of stress 2	Resource materials 3			
Relatively little stress 3	Job redesign, personnel reassignments 4			
Almost no stress at all 4	Don't know/Not sure 7			
Don't know/Not Sure 7	Refused 9			
Refused 9				
AZ2_2. In the past year, how much effect has stress had	AZ2_6. During the past 12 months, did you have?			
on your health:	Answer each 1,2,7, or 9			
A lot	a. Schizophrenia			
Some 2	b. Other paranoid/delusional disorder			
Hardly any 3	c. Manic episodes/or manic depression			
None 4	d. Major depression			
Don't know/Not Sure 7	e. Anti-social personality, OCP or other severe disorder			
Refused 9	f. Alzheimer's disease or other senile disorder			
	g. Alcohol abuse disorder			
	h. Drug abuse disorder			
AZ2_3. In the past year, did you think about seeking	AZ2_7. Because of (this/any of these) mental or			
help for any personal or emotional problem from family	emotional problem(s) are you unable to work or limited			
or friends?	in the kind of work or activity you can do?			
Yes 1	Yes 1			
No 2	No 2			
Don't know/Not sure 7	Don't know/Not sure 7			
Refused 9	Refused 9			
AZ2_4. From a helping professional or self-help group?				
Yes 1				
No 2				
Don't know/Not sure 7				
Refused 9				
AZ2_4a. Did you actually seek any help?				
Yes 1				
No 2				
Don't know/Not sure 7				
Refused 9				

APPENDIX III: 2001 ARIZONA QUESTIONNAIRE				
State Added: Osteoporosis	State Added: Antibiotic Resistance			
AZ3_1. Thinking back over the past month, how many				
servings of milk or milk products do you usually	(Check all that apply)			
consume each day? One serving equals 8 ounces of milk	Call a parent or grandparent for advice 01			
or yogurt, or two slices of cheese.	Call the doctor's office and get advice 02			
Less than 1 0	Go to the doctor's office 03			
1 serving 1	\mathcal{E}			
2 servings 2	Go to the urgent care room 05			
3 servings 3	Get advice from a pharmacist 06			
4 servings 4	Look for advice in magazines, pamphlets, &			
5 servings or more 5	other printed materials 08			
Don't consume 6	Look for advice on the internet 10			
Don't know/not sure 7	Take OTC medication to relieve symptoms 11			
Refused 9	Rest 12			
	Other 13			
	Don't Know 77			
	Refused 99			
AZ3_2. During the past month, did you regularly take	AZ4_2. When you are sick with a cold or the flu, do			
any supplements containing only calcium?	you call or see your health care provider to get			
Yes 1	antibiotics?			
No 2	All of the time 1			
Don't know/Not sure 7	Most of the time 2			
Refused 9	Some of the time 3			
	Never 4			
	Don't know/Not sure 7			
	Refused 9			
AZ3_3. Hw often do you take calcium supplements?	AZ4_3. When you get a cold, do antibiotics help you			
	get better faster?			
a. Per day b. Per week c. Per month 3	All of the time 1			
c. Per month	Most of the time 2			
d. Per year 4	Some of the time 3			
e. Never 5 5 5	Never 4			
Don't know/Not sure 7 7 7	Don't know/Not sure 7			
Refused 999	Refused 9			
AZ3 4. How often do you do strength building	AZ4_4. When prescribed an antibiotic, do you take it			
exercises, like lifting free weights, use weight training	until it is gone?			
	All of the time 1			
machines, or pushups or pullups?				
a. Per day 1				
b. Per week 2	Some of the time 3			
c. Per month	Never 4			
d. Per year 4	Don't know/Not sure 7			
e. Never 5 5 5	Refused 9			
Don't know/Not sure 7 7 7				
Refused 999				
AZ3_5. Have you ever been tested for osteoporosis by	AZ4_5. Do you stop taking antibiotics when your			
having a bone density scan which is a test that scans and	symptoms are gone?			
measures your bones, similar to an x-ray?	All of the time 1			
Yes 1	Most of the time 2			
No 2	Some of the time 3			
Don't know/Not sure 7	Never 4			
Refused 9	Don't know/Not sure 7			
	Refused 9			

APPENDIX III: 2001 ARI	ZONA QUESTIONNAIRE
AZ4_6. In the past, year, did you take antibiotics obtained without a prescription, prescribed for a previous illness, or prescribed for someone else? All of the time 1 Most of the time 2 Some of the time 3	AZ4_10. Do you think there is a good chance that you or someone in your family will get an antibiotic resistant infection sometime in the next ten years? Yes 1 No 2 Don't know/Not sure 7
Never 4 Don't know/Not sure 7 Refused 9	Refused 9
AZ4_7. Do you think viral infections can be cured with an antibiotic? All of the time 1 Most of the time 2 Some of the time 3 Never 4 Don't know/Not sure 7 Refused 9 AZ4_8. Are you aware of any health problems to yourself or other people associated with taking	State Added: Hepatitis C Risk AZ5_1. Do you know anyone who has been diagnosed as having Hepatitis C? Yes 1 No 2 Don't know/Not sure 7 Refused 9 AZ5_2. Do you think Hepatitis C can be spread thru: Sneezing or coughing 1
antibiotics? Yes 1 No 2 Don't know/Not sure 7 Refused 9	Kissing 2 Unprotected sex 3 Food or water 4 Sharing needles to inject street drugs 5 Using the same bathroom 6 Contact with blood of an infected person 8 Don't know/Not sure 7 Refused 9
AZ4_8A. Explain the problems you are aware of Rash/allergies/reactions to antibiotics 1 Concerns related to emerging drug resistance such as the following 2 bacteria/germs become resistant/immune to antibiotics/drugs, antibiotics/drugs might start to lose effect on bacteria/germs Antibiotics may kill friendly/good bacteria/flora 3 It's healthy to take antibiotics/drugs in general 4 Other 5 Don't know/Not sure 7 Refused 9	AZ5_3. Do you consider yourself at risk of Hepatitis C? Yes 1 No 2 Don't know/Not sure 7 Refused 9
AZ4_9. When my child has a sore throat or an earache, I expect my doctor to prescribe an antibiotic: All of the time 1 Most of the time 2 Some of the time 3 Never 4 Don't know/Not sure 7 Refused 9	AZ5_3A. What level of risk do you feel you are at for Hepatitis C? High risk 1 Moderate risk 2 Low risk 3 Don't know/Not sure 7 Refused 9
	AZ5_4. Have you ever been tested for Hepatitis C? Yes 1 No 2 Don't know/Not sure 7 Refused 9

APPEND	IX III. 2001 AR	IZONA QUESTIONNA	IRF	
ATTEND	1X 111. 2001 AIC	ZONA QUESTIONNA	are .	
AZ5_5. Have you ever been diagnosed by a physician AZ5_7. Have you ever used a needle or syringe to				
as having had Hepatitis C infecti	as having had Hepatitis C infection? street drugs (even once)?			
Yes	1	Yes	1	
No	2	No	2	
Don't know/Not sure	7	Don't know/Not sure	7	
Refused	9	Refused	9	
AZ5 6. Prior to 1992, had you o	ever received a blood			
transfusion or blood products?				
Yes	1			
No	2			
Don't know/Not sure	7			
Refused	9			

APPENDIX IV: BRFS WEIGHTING FORMULA

FINALWT = GEOWT*DENWT * 1 OVER NPH * NAD *CSA* POSTSTRAT

The computational formula above is intended to reflect all the possible factors that could be taken into account in weighting a state's data. Where a factor does not apply, its value is set to one.

FINALWT is the final weight assigned to each respondent.

GEOWT accounts for differences in the basic probability of selection among strata (subsets of area code/prefix combinations) intended to correspond as closely as possible to specified geographic regions of a state. It is the inverse of the ratio of the estimated sampling fraction of each stratum to the stratum with the largest estimated sampling fraction. There is almost never a complete correspondence between strata, which are defined by subsets of area code/prefix combinations, and regions, which are defined by the boundaries of government entities.

DENWT accounts for differences in the basic probability of selection between telephone numbers from a stratum that is presumed to contain many households (a high-density stratum) and telephone numbers from a stratum that is presumed to contain few households (a low-density stratum). It is the inverse of the ratio of the sampling fraction of the low-density stratum to the high-density stratum. In the BRFS, stratification by presumed household density is usually found in a design in which telephone numbers from hundred blocks (sets of telephone numbers with identical first eight digits and all possible final two digits) with one or more listed residential numbers (one-plus blocks) are sampled at a higher rate than telephone numbers from hundred blocks with no listed residential numbers (zero blocks).

1/NPH is the inverse of the number of residential telephone numbers in the respondent's household.

NAD is the number of adults in the respondent's household. CSA is the ratio of the expected cluster size to the actual cluster size.

POSTSTRAT is the number of people in an age-by-sex or age-by-race-by-sex category in the population of a region or a state divided by the sum of the products of the preceding weights for the respondents in that same age-by-sex or age-by-race-by-sex category. It adjusts for non-coverage and non-response and, before 1995, also adjusts for different probabilities of selection by region, where applicable.



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